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EXAMINER
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CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/659,089

Applicant(s)

SALEMI ET AL.

Examiner

Dennis Cordray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/3/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because Figure 6 has two separate layers referenced as 22a. It is believed that the reference number 22a at the left side of the figure should be 22b.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

In Figure 5, adhesive layer 52 has no reference number.

Figures 5-10 do not show reference number 18 for indicia applied to one or more layers.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

On p 5, the last sentence continuing on to p 6 is meaningless.

On p 7, the last sentence is incomplete.

On p 7, the second and sixth paragraphs are identical.

On p 16, the reference number "16." In the second line should be omitted.

Appropriate correction is required.

### ***Claim Objections***

4. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 recites that "the indentation is continuous along the sheet." The claim depends from Claim 12, which recites "the indentation is uniform across the sheet." If the indentation is uniform across the sheet, then it must be continuous from one side of the sheet to the other. If it were discontinuous, then it could not be uniform "across" the sheet. Also note that both

claims refer to a single indentation and that, if the indentation were not continuous, there would be multiple indentations.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 2 recites "the plurality of depressions are uniform across the base." The intended meaning of the word "uniform" is not clear. For example:

- are the depressions intended to be of the same dimensions and shape over the length and width of the base but can be unevenly spaced?
- are the depressions uniformly spaced over the length and width of the base but can have different shapes and/or sizes?
- do the depressions form a single row across the width or length of the base, or multiple rows?
- are the depressions intended to be of the same dimensions and shape and are uniformly spaced over the length and width of the base?
- is there some other intended meaning for "uniform?"

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6. Claim 3 recites "the plurality of depressions are continuous from side to side of the base. The intended meaning of the word "continuous" is unclear. For example:

- are the depressions in the form of continuous rows extending across the length and/or width of the base?
- are the depressions discontinuous with respect to each other but disposed in a continuous pattern across the length and/or width of the base?

7. Claims 1, 4-11, 15-19, 22 and 29 recite "associated with" in reference to two layers or, in claim 29, a liquid and the indented texture of the sheet. Claims 12, 14-17, 19-21 recite "applying" a layer to the sheet. Claims 16, 18, 19 and 22 recite "adhering" one layer to another. It is not clear how the terms "associated with", "applying", and "adhering" are intended to relate to one another and how the product is intended to be assembled. The word "associate" means to unite in a relationship, or to connect or join together. The word "apply" means to put on, or to put or adapt to a special purpose or use. The word "adhere" means to stick fast together by or as if by being glued (Websters II New Riverside University Dictionary, The Riverside Publishing Company, 1988). By adhering or applying one layer to another, the layers inherently become associated with one another. When a layer is claimed as being associated with another layer, does that mean one has been applied to the other, and are the layers adhered, or stuck, together? Some specific examples are as follows:

Claims 16 and 18 recite "adhering a paper layer to the water resistant layer wherein the antimicrobial layer is associated with the paper layer." Are the layers

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assembled such that one surface of the antimicrobial layer is in contact with one surface of the paper layer, or have the paper layer and antimicrobial layer previously been joined and the bilayer paper adhered to the water resistant layer?

Claim 17 recites "applying a plurality of water resistant layers to the first side of the sheet wherein the antimicrobial layer is associated with the plurality of water resistant layers." Are the water resistant layers stuck to the antimicrobial layer and the multiple layer sheet brought into contact with the first side of the sheet? Is the antimicrobial layer sandwiched between the first side of the sheet and the plurality of water resistant layers? Is the plurality of water resistant layers sandwiched between the first side of the sheet and the antimicrobial layer? Is the antimicrobial layer sandwiched between water resistant layers and the multiple layers brought into contact with the first side of the sheet? Claim 19 presents similar possibilities.

8. Claim 19 recites the limitation "adhering a plurality of paper layers to the plurality of paper layers." There is insufficient antecedent basis for this limitation in the claim.

9. Claim 26 recites "positioning the sheet on a surface wherein the bottom surface of the sheet is adjacent to the surface." It is not clear what the word "surface" refers to. For instance, is it a table or cutting board surface, the surface of a cutting utensil, the bottom surface of a container, the surface of the object to be protected, the surface of another sheet of the paper, the surface of a user's skin or some other surface?

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The remaining claims are dependent on rejected claims thus inherit the indefiniteness thereof.

***Claim Rejections - 35 USC § 102***

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-5, 7, 9-16, 18, 20-22 and 24-25 are rejected under 35 U.S.C. 102(a) or 102(e) as being anticipated by Lindsay et al (6610173).

Lindsay et al discloses a three-dimensional paper web having a pattern of protrusions (plurality of indentations or depressions) that extend outside the plane of the paper (Abs; ref # 68 in Figs 2A, 2B, 3A, 3B; col 11, lines 44-48; col 12, lines 43-45). The web can be made into sheets and stacked in planar form (thus the base forms a plane), thus can have a defined length and width (col 31, lines 47-50). The web can have opposing outer surfaces (i.e.-a top side and a bottom side) (col 31, lines 16-38). The product can have multiple layers (i.e.-a plurality of paper layers), and a pair of plies, such as the opposing outer surfaces can comprise hydrophobic matter (water resistant layer) and/or antimicrobial additives (col 31, lines 19-25 and 30), thus a paper layer can be sandwiched between the outer layers or between the top layer and the base paper. The pair of plies comprising hydrophobic matter and/or antimicrobial additives need not be the outer surfaces, thus the hydrophobic layer can be sandwiched between the base



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layer and the antimicrobial layer or can be adjacent to the antimicrobial layer (one possible meaning of "associated with"). Alternatively, the hydrophobic layer can be applied to the antimicrobial layer and can be the top layer. The upper layer can have both hydrophobic matter and antimicrobial additives (alternate possible meaning of "associated with"). The plurality of depressions can be uniform in size and shape (Fig 3A; col 12, lines 43-61). Figures 9A, 9B and 10 show that the pattern is continuous from side to side across the web (col 19, lines 1-64, especially lines 14-16, 43-46 and 55-62). The indentations in the web are made between the raised elements 60 of the deflection member 36. Lamination of additional layers can be achieved through crimping or perf-embossing (each of which would form one or more indentations or scores in the combined sheet that can be uniform across and continuous along the sheet) (col 31, lines 34-36). Lamination can also be achieved through adhesive attachment (adhering layers together). The web can also be printed or divided into a plurality of sheets (col 33, lines 20-25).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4-11, 17, 19 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al in view of Oikawa et al (6150004).

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Lindsay et al does not disclose that there can be multiple water-resistant layers.

Oikawa et al discloses an antimicrobial laminate and a bag using the laminate.

The laminate comprises a paper layer 33, a steam impermeable layer 34, and multiple alternating antimicrobial-containing 16a, 16b and steam-pervious layers 17a, 17b (Figs 14-15; col 20, line 65 to col 21, line 26). The steam-pervious layers have minute pores that can be sized to restrict the amount of water that can pass (thus the layers function as moisture resistant layers) (col 10, lines 5-21). The benefit is to control the release of the antimicrobial agent, which is released by the action of water, to extend the preservation of food enclosed in the laminate. Oikawa et al also discloses a bag made from the antimicrobial laminate for preserving food (food is enclosed within the laminate and is surrounded by the antimicrobial surface) (col 22, lines 30-31). Placing the food into the bag is equivalent to wrapping the antimicrobial surface around the food. In another embodiment, the laminate is cut into smaller sheets, which are applied to the inner wall surfaces of a container used to store food (col 22, lines 32-38). In this embodiment, the sheet would be applied to a surface (container), thus the bottom of the sheet is adjacent to the surface of the container.

The art of Lindsay et al, Oikawa et al and the instant invention are analogous as pertaining to multilayered antimicrobial containing laminates. It would have been obvious to one of ordinary skill in the art to use multiple moisture resistant layers and multiple antimicrobial containing layers in the product of Lindsay et al in view of Oikawa et al to control the rate of depletion of the antimicrobial agent. Where the antimicrobial sheet is applied to the inner surface of a storage container, it would have been obvious

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to position the object to be stored on the sheet within the perimeter of the sheet in order to fit it into the container.

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al in view of Ehrnsperger et al (6160200).

Lindsay et al does not disclose separating a liquid from the object wherein the liquid is associated with the indented texture of the sheet. Lindsay et al does disclose that the web can be converted to an absorbent article (col 33, lines 20-25).

Ehrnsperger et al discloses a waste passage member comprising an absorbent core for absorbing and retaining fluids (Abs; col 7, lines 22-26) and a barrier layer to prevent wastes from moving back to the wearers skin (col 13, lines 60-66). The barrier layer can have a skin care composition (col 14, lines 16-19) which can comprise an antimicrobial (col 17, lines 5-8).

The art of Lindsay et al, Ehrnsperger et al and the instant invention are analogous as pertaining to multilayered antimicrobial containing laminates. It would have been obvious to one of ordinary skill in the art to make an absorbent product using the product of Lindsay et al in view of Ehrnsperger et al as a well known use of absorbent materials. It would have been obvious to include a barrier layer in the absorbent product with a skin care composition including an antimicrobial to protect the wearer's skin from contamination.

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13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al in view of Lewis, II et al (6276300).

Lindsay et al does not disclose shredding the sheet.

Lewis, II et al discloses animal litter comprising shredded paper containing an antimicrobial (col 2, lines 9-16).

The art of Lindsay et al, Lewis, II et al and the instant invention are analogous as pertaining to antimicrobial containing paper. It would have been obvious to one of ordinary skill in the art to make an animal litter product using the product of Lindsay et al in view of Lewis, II as a functionally equivalent use of an absorbent and odor-controlling material.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure [Ampulski et al (5855739), Ampulski et al (5904811), Chen et al (US 2004/0111817), Chen et al (US 2004/0123963)]. They pertain to other laminated composites comprising indented paper-containing layers, antimicrobials and moisture resistant layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*DRC*

DRC

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